

**REMARKS**

Claims 15-22 are pending in the present application. Claims 21 and 22 have been amended. Claims 1-3, 5, 10-12 and 14 have been canceled.

**Priority Under 35 U.S.C. 119**

A Claim of Priority Letter and certified copy of Priority Application No. 2002-242982 were filed on November 17, 2005. A copy of Priority Application No. 2002-242982 has been entered into the image file wrapper of the present application on the U.S. Patent Office website. **The Examiner is respectfully requested to acknowledge receipt of the certified copy of the priority document, and to confirm on the record that the Claim for Priority Under 35 U.S.C. 119 is complete.**

**Drawings**

One (1) red-inked drawing Annotated Sheet and one (1) drawing Replacement Sheet were filed along with the Amendment dated July 12, 2006. The drawing Replacement Sheet has been entered into the image file wrapper of the present application on the U.S. Patent Office website. **The Examiner is respectfully requested to acknowledge on the record receipt and acceptance of the drawing Replacement Sheet.**

**Claim Rejections-35 U.S.C. 103**

Claims 1-3, 5, 10-12 and 14-22 have been rejected under 35 U.S.C. 103(a) as being unpatentable over the Safi reference (U.S. Patent No. 5,681,470) in view of the Shiba et al. reference (U.S. Patent No. 6,423,534). This rejection is respectfully traversed for the following reasons.

The method for eliminating a harmful substance from an organic exhaust gas of claim 15 includes in combination among other features “providing a biological filter medium supporting bacteria, the biological filter medium having opposite first and second surfaces”; and “supplying the treating liquid containing the harmful substance to the biological filter medium from opposite first and second directions to the opposite first and second surfaces, so that the harmful substance is biochemically degraded by the bacteria supported by the biological filter medium”. Applicant respectfully submits that the prior art as relied upon by the Examiner does not make obvious these features.

Initially, Applicant notes that the Examiner has not specifically addressed claim 15 in the outstanding prior art rejection as set forth in the Final Office Action dated October 11, 2006.

Regarding the “filter medium supporting bacteria”, the Examiner has asserted on page 3 of the Final Office Action that “it would have been obvious to one of ordinary skill in the art to use any means to promote the contact between the liquid to be treated and the bacteria. Without a showing of criticality or unexpected results, the use of the such “filter medium” is not seen as a patentable difference”. Applicant respectfully

disagrees for the following reasons.

As described on page 15 of the present application with respect to Fig. 2, up-flow washing nozzle 234 makes it possible to inject a treating liquid upward from nozzle portions thereof, from the bottom of biological filter medium 221. When the permeability of air which is fed from the sprinkling pipe 235 and passed through biological filter medium 221 upwards is decreased because of the large number of dead bacteria adhered on the surface of medium 221, it is possible to remove such adhered dead bacteria by injecting the treating liquid from the nozzle portions of the up-flow washing nozzles 234.

Applicant respectfully submits that the prior art as relied upon by the Examiner, primarily the Safi reference, does not disclose or even remotely suggest providing a biological filter medium supporting bacteria, whereby the filter medium has opposite first and second surfaces, as featured in claim 15. Moreover, the relied upon prior art, particularly the Safi reference, does not disclose or make obvious supplying treating liquid to a biological filter medium supporting bacteria, from opposite first and second directions to opposite first and second surfaces of the biological filter medium, as would be necessary to meet the features of claim 15. Applicant therefore respectfully submits that the method for eliminating a harmful substance from an organic exhaust gas of claim 15 would not have been obvious in view of the prior art as relied upon by the Examiner taken singularly or together, and that this rejection of claims 15-20 is improper for at least these reasons.

The method for treating an organic exhaust gas of claim 21 includes in combination among other features "contacting bacteria with the treating liquid containing the harmful substance so that the harmful substance is biochemically degraded"; and "supplying bubbled air to the bacteria". The prior art as relied upon by the Examiner does not disclose or suggest supplying bubbled air to bacteria, wherein the bacteria contacts treating liquid containing harmful substances. Incidentally, the Examiner has not addressed claim 21 in the Final Office Action. Applicant respectfully submits that the method for treating an organic exhaust gas of claim 21 would not have been obvious in view of the prior art as relied upon by the Examiner taken singularly or together, and that this rejection of claim 21 is improper for at least these reasons.

The method for eliminating a harmful substance of claim 22 includes in combination among other features "contacting the carriers with the treating liquid containing the harmful substance so that the harmful substance is biochemically degraded by the bacteria supported by the carriers"; and "supplying bubbled air to the carriers supporting the bacteria".

Applicant respectfully submits that the prior art as relied upon by the Examiner does not disclose or make obvious supplying bubbled air to carriers supporting bacteria, as would be necessary to meet the features of claim 22. Incidentally, the Examiner has not addressed claim 22 in the Final Office Action. Applicant respectfully submits that the method for eliminating a harmful substance of claim 22 would not have been obvious in view of the prior art as relied upon by the Examiner, and that this rejection of

claim 22 is improper for at least these reasons.

### **Conclusion**

The Examiner is respectfully requested to enter the above noted amendments. Claims 1-3, 5, 10-12 and 14 have been canceled, thus reducing the issues. Moreover, claims 21 and 22 have been amended merely to be in independent form. Consideration of claims 21 and 22 as amended to be in independent form would raise no new issues, because claims 21 and 22 have been previously considered and examined.

Moreover, since claims 21 and 22 have been amended merely to be in independent form, rather than to further distinguish over the relied upon prior art, the amendments to claims 21 and 22 should not be construed as narrowing scope within the meaning of *Festo*.

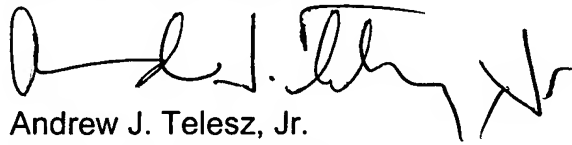
The Examiner is respectfully requested to reconsider and withdraw the corresponding rejection, and to pass the claims of the present application to issue, for at least the above reasons.

In the event that there are any outstanding matters remaining in the present application, please contact Andrew J. Telesz, Jr. (Reg. No. 33,581) at (571) 283-0720 in the Washington, D.C. area, to discuss these matters.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment for any additional fees that may be required, or credit any overpayment, to Deposit Account No. 50-0238.

Respectfully submitted,

VOLENTINE & WHITT, P.L.L.C.

A handwritten signature in black ink, appearing to read "A. J. Telesz, Jr.", followed by a stylized flourish or checkmark.

Andrew J. Telesz, Jr.  
Registration No. 33,581

One Freedom Square  
11951 Freedom Drive, Suite 1260  
Reston, Virginia 20190  
Telephone No.: (571) 283-0720  
Facsimile No.: (571) 283-0740